

IN THE CLAIMS

Claims 51 and 52 are pending.

Claim 51 (currently amended): A cold separation device for separating a cold elongate metallic workpiece along a substantially longitudinal axis thereof into two separate parts, said device comprising:

separate first, second and third spaced apart workpiece supports, said first and third workpiece supports extending upstream and downstream respectively of said second workpiece support;

a separation unit mounting a metal cutting means, said second support which support comprises ancillary under-supports disposed laterally to either side of said metal cutting means and engagable with an underside of said elongate metallic workpiece, and means to constrain lateral movement of said workpiece passing through said separation unit, comprising at least one pair of horizontally spaced apart non-driven guide rollers adjacent said metal cutting means, each guide roller of said pair being freely rotatable about a substantially vertical axis and spaced laterally to a respective side of said metal cutting means, said constraining means providing no lateral constraint of movement of said workpiece downstream of a most downstream pair of said non-drive guide rollers;

said first workpiece support including an elongate conveyor table comprising a plurality of horizontally disposed rollers, said third workpiece support surface including a receiving table arranged to receive and support fully separated workpieces issuing from said separation unit, wherein the width of said receiving table is substantially greater than the width of said second workpiece support surface; and

a feeder ~~comprising~~ consisting of:

a pusher upstream of said cutting means and adjacent said elongate conveyor table, said ~~feeder~~ pusher movable back and forth between respective distal ends of said elongate conveyor table in a substantially horizontal plane by a linear drive means; and

downstream of said cutting means, a plurality of horizontally disposed driven rollers engageable with an underside of said elongate metallic workpiece;

said first and third workpiece supports extending in substantially a common horizontal plane and said second support movable in a direction substantially perpendicular to said common horizontal plane.

Claim 52 (currently amended): A process for separating a cold elongate metallic workpiece along a substantially longitudinal axis thereof into two separate sections, said process comprising the steps of:

providing a separation device comprising:

separate first, second and third spaced apart workpiece supports, said first and third workpiece supports extending upstream and downstream respectively of said second workpiece support;

a separation unit mounting a metal cutting means, said second support which support comprises ancillary under-supports disposed laterally to either side of said metal cutting means and engageable with an underside of said elongate metallic workpiece, and means to constrain lateral movement of said workpiece passing through said separation unit, comprising at least one pair of horizontally spaced apart non-driven guide rollers adjacent said metal cutting means, each guide roller of said pair being freely rotatable about a substantially vertical axis and spaced laterally to a respective side of said metal cutting means, said constraining means providing no lateral constraint of movement of said workpiece downstream of a most downstream pair of said non-drive guide rollers;

said first workpiece support including an elongate conveyor table comprising a plurality of horizontally disposed rollers, said third workpiece support surface including a receiving table arranged to receive and support fully separated workpieces issuing from said separation unit, wherein the width of said receiving table is substantially greater than the width of said second workpiece support surface; and

a feeder ~~comprising~~ consisting of:

a pusher upstream of said cutting means and adjacent said elongate conveyor table, said ~~feeder~~ pusher movable back and forth between respective distal ends of said elongate conveyor table in a substantially horizontal plane by a linear drive means; and

downstream of said cutting means, a plurality of horizontally disposed driven rollers engageable with an underside of said elongate metallic workpiece;

said first and third workpiece supports extending in substantially a common horizontal plane and said second support movable in a direction substantially perpendicular to said common horizontal plane;

placing said elongate metallic workpiece on said first support;

aligning said substantially longitudinal axis of said elongate workpiece with said cutting means of said separation unit;

feeding said elongate workpiece through said separation unit to cut said separate sections;

supporting said separate sections; and

constraining lateral movement of said ~~elongated~~ elongate workpiece in said separation unit.